In the Claims

1. (currently amended) A digital sensor for monitoring wear of a lining material of disc brakes, which sensor is adapted to be attached at an end of an adjustment shaft of an adjusting mechanism for adjusting the position of brake pads in relation to a brake disc, which sensor comprises:

a first code part, said first code part being rotated continuously by rotation of the adjustment shaft and comprising a code wheel, and

a second code part, said second code part comprising ~~at least one of~~ a sliding part in the form of a code rack which is moved in a linear fashion~~, a sliding part in the form of a sleeve which is moved in a linear fashion, and a code wheel~~.

2. (previously presented) The sensor of claim 1, characterized in that the second code part is moved intermittently by the rotation of the adjustment shaft.

3. (currently amended) The sensor of claim 2, characterized in that the sensor further comprises detectors directed towards the code parts, a connection part of the first code part drivingly connected to the adjustment shaft of the disc brake, ~~and~~ a printed circuit board, ~~(PCB)~~ and that the code parts have code paths turned towards the detectors of the printed circuit board ~~(PCB)~~.

4. (previously presented) The sensor of claim 3, characterized in that a code on the code parts is formed by at least one of magnets, light and dark sectors, and presence or absence of holes.

5. (currently amended) The sensor of claim 4, characterized in that the detectors are received on the printed circuit board ~~(PCB)~~; that the printed circuit board ~~(PCB)~~ has circuitry to relate signals from the detectors to the wear of the lining material of the brake; that the two or more code parts are arranged on side of the printed circuit board

~~(PCB)~~ or on opposite sides of the printed circuit board ~~(PCB)~~; and that a Graycode is used.

6. (previously presented) The sensor of claim 5, characterized in that the detectors comprise at least one of optical detectors, magnetic sensors and mechanical switches.

7. (previously presented) The sensor of claim 6, characterized in that the detectors are at least one of magnetoresistive sensors and hall effect sensors.

8. (previously presented) The sensor of claim 1, characterized in that the first code part or a part drivingly connected to the first code part, has a finger for co-operation with teeth of the second code part and that the finger is arranged to advance the second code part a distance corresponding to one tooth for each turn of the first code part.

9. (currently amended) The sensor of claim 7, characterized in that seven detectors are arranged on the printed circuit board ~~(PCB)~~ for reading up to four different paths on the second code part.

10. (withdrawn) The sensor of claim 8, characterized in that a part drivingly connected to the adjustment shaft or an extension of the adjustment shaft is received in a slot of the second code part.

11. (withdrawn) The sensor of claim 7, characterized in that the sensor further comprises a third code part.

12. (withdrawn) The sensor of claim 11, characterized in that the three code parts are two code wheels and one code rack.

13. (withdrawn) The sensor of claim 11, characterized in that the three code parts are one code wheel and two code racks.

14. (withdrawn) The sensor of claim 7, characterized in that the sensor comprises two code wheels.

15 - 20. (cancelled)

21. (withdrawn) The sensor of claim 8, characterized in that a clamp is biased by means of a spring against teeth of the second code part.